

AMENDMENTS TO THE CLAIMS

1. (Cancelled)

2. (Currently Amended) In a device for minimally invasive applications, the improvement comprising:

a structure for at least positioning and bending a ~~distal end~~ portion of said device, said structure including

a quantity of shape memory alloy in said portion and

a quantity of shape memory polymer in said portion,

said shape memory alloy having a longitudinally extending coiled configuration in said portion with more than one wrap, and

said shape memory polymer comprising a cylinder, wherein said portion is positioned in said device such that changes in transition of said shape memory alloy causes said device to bend.

3. (Previously Amended) The improvement of Claim 2, wherein said shape memory alloy is embedded within said shape memory polymer.

4. (Original) The improvement of Claim 2, wherein said shape memory alloy is positioned within said shape memory polymer.

5. (Previously Amended) The improvement of Claim 2, wherein said coil configuration is longitudinally compressed and retained in said shape memory polymer so as to define a hollow tube cylinder with a wall surface and having said coil configuration embedded in said wall surface thereof.

6. (Previously Amended) The improvement of Claim 5, wherein said coil configuration has an axis coaxial with an axis of said hollow tube cylinder.

7. (Withdrawn)

8. (Previously Amended) The improvement of Claim 2, including a plurality of structures each having a longitudinally extending coiled configuration of shape memory alloy located within said shape memory polymer comprising a cylinder.

9. (Original) The improvement of Claim 8, wherein each coil configuration has a different configuration.

10. (Original) The improvement of Claim 8, wherein said plurality of units are in a series configuration.

11. (Currently Amended) In a device for minimally invasive applications, the improvement comprising:

a structure for at least positioning and bending a ~~distal end~~ portion of said device,

said structure including a quantity of shape memory alloy in said portion and

a quantity of shape memory polymer in said portion,

said quantity of shape memory polymer is a cylinder, and

wherein said quantity of shape memory alloy is wrapped around at least a portion of said shape memory polymer, wherein said portion is positioned in said device such that changes in transition of said shape memory alloy causes said device to bend.

12. (Original) The improvement of Claim 11, wherein said quantity of shape memory alloy has a ribbon configuration.

13. (Withdrawn)

14. (Currently Amended) The improvement of Claim ~~2~~ 11, wherein said quantity of shape memory alloy is composed of a plurality of shape memory alloy strips.

15. (Previously Amended) The improvement of Claim 2 11, wherein said quantity of cylindrical shape memory polymer has a closed cylinder configuration.

16. (Previously Amended) The improvement of Claim 15, wherein said quantity of shape memory alloy has a closed tubular configuration located within said shape memory polymer.

17. (Currently Amended) The improvement of Claim 15, wherein said quantity of shape memory alloy is composed of a plurality of strips, and wherein said strips are located in a wall surface of said shape polymer.

18. (Original) The improvement of Claim 17, wherein said plurality of strips are in said wall surface in a direction selected from the group consisting longitudinal and radial with respect to an axis of said configuration.

19. (Previously Amended) The improvement of Claim 17, wherein said plurality of strips are in a spaced longitudinal relationship.

20. (Original) The improvement of Claim 18, wherein said plurality of strips are located spaced radial relationships.

21. (Previously Amended) The improvement of Claim 17, wherein said plurality of strips are located in openings in said shape memory polymer.

22. (Previously Amended) The improvement of Claim 15, wherein said quantity of shape memory alloy is composed of a plurality of sections embedded in said shape memory polymer.

23. (Withdrawn)

24. (Withdrawn)

25. (Withdrawn)

26. (Withdrawn)

27. (Withdrawn)

28. (Currently Amended) The improvement of Claim 2 11, wherein said quantity of shape memory alloy has a mesh, tubular configuration, wherein said quantity of shape memory polymer is a cylinder and wherein said mesh, tubular configuration is embedded in said shape memory polymer.

29. (Withdrawn)

30. (Withdrawn)

31. (Withdrawn)

32. (Currently Amended) The improvement of Claim 2 11, comprising a plurality of units each having a coiled configuration of shape memory alloy and a cylindrical configuration of shape memory polymer, said units being connected in series and connected to a light source via a plurality of optical fibers in a catheter and light control mechanism.

33. (Original) The improvement of Claim 32, wherein each coiled configuration has a different configuration.

34. (Currently Amended) An articulated tip for a catheter comprising a composite of shape memory alloy forming a portion of said tip and shape memory to polymer forming a portion of said tip, wherein said shape memory polymer comprises a cylinder, and wherein said portion is positioned in said tip such that changes in transition of said shape memory alloy causes said tip to bend.

35. (Previously Amended) A device for reversible fine positioning of an object, comprising:

a member constructed of shape memory polymer, wherein said shape memory polymer comprises a cylinder,

~~at least one~~ said member constructed of including a shape memory alloy located in or adjacent to said member ~~constructed of shape memory polymer in a~~

1
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position that will cause said device to bend upon a change in configuration of
said shape memory alloy, and

means for selectively heating said ~~members~~ shape memory alloy to cause
a change in configuration thereof, whereby the change in configuration results in
reversible positioning ~~thereof~~ of said object.
